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EXAMINER	
LONSBERRY, HUNTER B	
ART UNIT	PAPER NUMBER
2623	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/21/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/21/2007.

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mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	09/709,303	PARK ET AL.	
	Examiner	Art Unit	
	Hunter B. Lonsberry	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/1/06*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-10,12-17 and 20-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-10,12-17 and 20-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/1/06 have been fully considered but they are not persuasive.

Applicant argues that Mao and Kaplan cannot be combined since they teach away from each other. Mao teaches that it would be undesirable to utilize a two way connection since there may be an unacceptably long wait for a selected web page to appear and that it would be desirable to implement interactive Internet access with a quick response time, not requiring establishment of Internet access, Internet connection and subsequent downloading from the remote website. Further there is no motivation to combine (amendment pages 15-19).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Mao discloses a system in which an AV signal has simulcast HTML content. Kaplan discloses a system in which a user may navigate a webpage to change a currently selected TV program,

discloses displaying a webpage of the entirety of a television display, discloses connecting to FTP sites, gophers etc (column 5, lines 60-65, column 6, lines 22-36, and 59-61), and the ability to save received Internet addresses without having to leave the program signal (column 3, lines 5-8). Therefore, it would have been obvious to modify the Internet display system of Mao to utilize the navigation features, access to FTP and gophers, the full display of a web site, and saving received web address features of Kaplan for the advantage of making it easier to view Internet content through using the entirety of a display, access different types of content, make it easy for a user to find programming of interest and allow a user to revisit interesting websites at a time of their choosing.

Further, Mao and Kaplan both disclose combination television/Internet systems. While Mao does disclose that access to the PSTN may tie up a house phone line, Kaplan discloses utilizing a cable modem, which does not require the use of a house phone line (column 2, lines 33-36). Further, the use of a return line provides more flexibility to a user in that a user can access additional sources of content at a time of their own choosing and the use of a cable modem provides a high speed pathway for the delivery of content and for the transmission of requests, thus minimizing any delays. Thus the combination of Mao and Kaplan is proper.

Applicant traverses the Official Notices taken in claims 19,23 and 13 (page 20).

As a preliminary matter, the Examiner notes that the Official Notices have been present in the past few Office Actions, further the following statement has appeared in the prior actions:

"Applicant's failure to traverse the Official Notice's taken in the prior action is viewed as admission of prior art."

Applicant must specifically point out the supposed errors in the Examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well known in the art. See 37 CFR 1.111(b). Applicant simply makes a broad statement without referring to the specific features of which Official Notice was taken.

This is not a proper traversal but instead a *vague and general statement* which fails to inform the examiner which Official Notices are being traversed and fails to address specifically why each specific Official Notice is not considered to be common knowledge.

Further, to clarify the record, the Examiner requests confirmation that Applicant was the first to invent: a browser uniting which includes a forward/backward button, the button is used to select the data contents, and displaying a message indicating that the requested content cannot be displayed. Further the Examiner requests disclosure within the specification to substantiate that applicant is the first to invent each of these features and detailed information, which shows how to make or use each feature.

Upon appeal or proper traversal, the Examiner will supply a reference as documentary evidence for each Official Notice in that at the current time Applicant fails

to properly traverse the Official Notices taken in the previous action.

Applicant argues that in claim 7, displaying only the A/V signal is conditioned upon the browser function not being operated. In contrast, in Shoff simply displaying the video data stream is conditioned upon there being no supplemental content. The absence of supplemental content is not equivalent to the browser function not being operated. Applicant argues that the Examiner is arguing inherency and the browser function may also not be operated for a variety of other reasons such as the user simply choosing not to operate the browse function. Because the feature does not necessary flow from the teachings of Shoff, the inherency argument fails (pages 20-21).

The Examiner disagrees, as correctly noted by Applicant, Shoff teaches displaying only a video signal if no supplemental content is detected. Shoff however goes further than that as reproduced below:

(31)The method begins when a viewer tunes to a particular channel (step 150 in FIG. 6). The channel navigator 102 controls the tuner 98 to tune to the channel. The viewer-computing unit checks the appropriate channel and time slot of the EPG data structure 48 to determine if the program being carried on the selected channel at this time is interactive (step 152). As described above, the presence of a target specification in the EPG data field 58 in association with the program is an indication that the program is interactive

compatible and that there is supplemental content for the program. If the data field is empty, indicating that no supplemental content exists (i.e., the "no" branch from step 154), the viewer-computing unit simply displays the video data stream being received through the tuner 98 (step 156).

(32) A run-time technique can alternatively be used for detecting whether a program is interactive compatible. Rather than checking the EPG data field, the viewer-computing unit checks a dedicated channel for the existence of new supplemental content data. The dedicated channel is separate from the selected channel carrying the program so that the supplemental content is received by the viewer-computing unit currently with the program video data. The existence of a supplemental content data stream over the dedicated channel indicates that the program being received on the selected channel is interactive compatible. This technique can be carried out without reference to the EPG listing.

(33) If the program is interactive compatible (i.e., the "yes" branch from step 154), the viewer computing unit retrieves the target specification from the EPG data structure (step 158 in FIG. 6). The target specification might be a pointer to a memory location at the headend, or a pointer to a memory location on a locally running CD-ROM, or a hyperlink to a target resource located at an independent service provider. The hyperlink browser 106 is loaded onto the processor to render the target resource referenced by the

target specification (step 160).

(34) At this point, there are several ways to initiate viewing the supplemental content. One approach is to permit the viewer to selectively activate the interactive mode (i.e., the "viewer activate" branch from step 160). The viewer may know that the program is interactive compatible by checking a newspaper listing or other program guide. Another way is to have the viewer computing unit display an icon or other indicia on the screen to visually inform the viewer that the program is interactive compatible (step 162 in FIG. 6). The icon can be overlaid on the playing video program in a non-conspicuous manner, like the closed caption or stereo labels.

The Examiner notes the last sentence of paragraph 33. This clearly teaches that the browser process is only instigated upon detection of interactive content. The Examiner is not alleging inherency as Shoff clearly teaches when the process is started. Additionally, Shoff teaches that the user can choose whether or not to display the supplemental content. Applicant argued the above as an alternative to an inherency argument, which Shoff does in fact teach. Further the claim requires that if a browser function is not operated, only the A/V signal is displayed. The claim is silent as to what exactly a browser function is. Is it a display function? Is it a browser process? The broadest possible reasonable interpretation would include a browser function to be the display of supplemental content . Therefore, the combination with Shoff is proper.

Applicant's failure to traverse the Official Notice's taken in the prior action is viewed as admission of prior art. Applicant must specifically point out the supposed errors in the Examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well known in the art. See 37 CFR 1.111(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 5, 6, 12-17, 19, 20, 22-27, and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mao et al in further view of Kaplan.

Regarding Claim 1, Mao shows a data contents processing method, comprising:

separating audio/video signals and data contents upon receipt of a broadcast signal and extracting information on the currently received channel and a program identifier (page 2 sections 0019-0022),

constructing a database by forming an integrated information of the channel/program identifier information and data contents in connection with each other (page 2 sections 0019-0026),

checking whether or not the data contents to be displayed are consistent with the current A/V material (page 2 sections 0026-0029, page 3 sections 0030-0033, page 4 section 0058, locating desired webpage, page 5 section 0063, processor controlling the searching of the webpages, page 6 section 0081, synchronized to the content of the broadcast video program),

performing conversation of data contents if it is found that the data contents to be displayed are not consistent with the current AV signal (page 5, sections 71-72, 75-77, when a new event occurs a new web page is displayed), and not performing the conversion of the data contents if it is found that the data contents to be displayed are consistent with the current AV signal (page 5, sections 0066-69, 71-72, a cache is utilized which displays the same page rather than retrieving the webpage from the rotating carousel in response to an event)

displaying the converted data contents with the A/V signal (page 4 sections 0059, page 5 section 0063),

wherein the conversions of data contents includes receiving data content consistent with the current AV signal (page 3 section 0031, sections 61-69, page 6 sections 0081-0082, changing content is synchronized with channel change). Mao shows a system the downloaded and extracts Internet information associated with a television signal. This information is stored and used to associate additional information

with programming data. When a user changes a channel, the system checks to see if the additional data corresponds to the A/V signal. If there is different Internet data to be displayed, the system displays the new additional data on screen after converting the data from an MPEG PID stream to HTML data. Further when new data associated with a new event corresponding to a program is received the new HTML webpages are converted for display. Additionally the first time a user views a program with simulcast data, the data must be converted for display as it has not yet been transmitted due to the data being simulcast with that event.

Mao fails to show that if the current user desired data contents are selected, the current channel is tuned to the channel corresponding to the selected data.

Kaplan shows tuning to a channel based upon changing the data contents (col. 6 lines 22-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mao with the ability to change the channel tuned by selecting different content data so that the user would be provided with the appropriate television signal while he or she was surfing the Internet. Furthermore, this would provide an added navigational means in which the user could search for desired material.

Regarding Claim 2, Mao shows that if a channel is changed, the additional data is changed as well (page 4 section 0059).

Regarding Claim 3, Mao shows that, no matter what channel is displayed, the additional data always corresponds to the A/V material being shown (page 2 0019-0028, page 3 sections 0030-0031, page 4 section 0059).

Regarding Claim 5, Mao fails to specifically state viewing only the broadcast channel. Kaplan shows viewing only the broadcast channel (col. 6 lines 17-21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mao with the ability to only tune to the broadcast channel in case the user was not interested in additional content.

Regarding Claim 6, Mao shows adjusting a channel to show the A/V signals and data content (page 5 section 0070).

Regarding claims 12-13, Mao shows an inverse multiplexing unit (page 4 section 0060, fig. 8, demodulator and demultiplexer), a database constructing unit (page 4 section 0055-0056, storing HPAT database, page 5 sections 0063-0069, cache and storage), an A/V interface control unit (fig. 8 item 814, micro processor), and a browser unit for displaying the current A/V signal and database content (fig. 8 item 816 and 820, WWW browser connected to TV). All of the remaining limitations of the Claim have been discussed with regards to Claim 7.

While Mao shows using a demultiplexer, or inverse multiplexer, to tune the television signal (fig. 8), Mao fails to show that if the current user desired data contents

are selected, the current channel is tuned to the channel corresponding to the selected data. Kaplan shows tuning to a channel based upon changing the data contents (col. 6 lines 22-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mao with the ability to change the channel tuned by selecting different content data so that the user would be provided with the appropriate television signal while he or she was surfing the Internet. Furthermore, this would provide an added navigational means in which the user could search for desired material.

Neither Mao nor Kaplan shows using a forward or back button. Official Notice is given that it is well known and expected in the art to use a forward and a back button while using an Internet browser. Going forwards and backwards within a browser enables a user to access pages that the user has recently viewed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Mao and Kaplan to use a forward and back button on the browser so the user could access pages that he or she had recently viewed.

Regarding Claim 14, Mao shows the use of multiple multiplexing units and de-multiplexing units for displaying the A/V signals on a display unit (fig. 7 & 8).

Regarding Claim 15, Mao shows a database-constructing unit with storage for storing the separated data (page 2 sections 0021-0022, page 5 sections 0065-0068).

Regarding Claim 16, Mao shows a plurality of programs corresponding to one channel, and a plurality of data contents corresponding to each program (fig. 4 and fig. 6).

Regarding Claim 17, Mao shows that when a user selects a new channel the system checks to see if there is corresponding data contents and controls the browser to display the corresponding data contents (page 2 sections 0026-0029, page 3 sections 0030-0033, page 4 sections 0058-0059, locating desired webpage, page 5 section 0063, 0070, processor controlling the searching of the webpages, page 6 section 0081, synchronized to the content of the broadcast video program). Since the processor synchronizes the data contents and AV signal, it automatically controls the browser to select the data contents corresponding to the channel.

Regarding Claim 19, neither Mao nor Kaplan shows using a forward or back button.

Official Notice is given that it is well known and expected in the art to use a forward and a back button while using an Internet browser.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Mao and Kaplan to use a forward

and back button on the browser so the user could access pages that he or she had recently viewed.

Regarding Claim 20, Mao shows a data content processing method comprising: receiving a bit stream of broadcast data (fig. 8 item 802),

separating audio/video signals and data contents upon receipt of a broadcast signal from the bit stream of a selected channel (page 2 sections 0019-0022),

when a user selects a new channel the system checks to see if there is corresponding data contents and controls the browser to display the corresponding data contents (page 2 sections 0026-0029, page 3 sections 0030-0033, page 4 sections 0058-0059, locating desired webpage, page 5 section 0063, 0070, processor controlling the searching of the webpages, page 6 section 0081, synchronized to the content of the broadcast video program). Since the processor synchronizes the data contents and AV signal, it automatically controls the browser to select the data contents corresponding to the channel. Mao also shows displaying the AV signals and corresponding data contents (page 4 section 0058, page 5 section 0070), further Mao discloses:

performing conversion of data contents if it is found that the data contents to be displayed are not consistent with the current AV signal (page 5, sections 71-72, 75-77, when a new event occurs a new web page is displayed), and not performing the conversion of the data contents if it is found that the data contents to be displayed are consistent with the current AV signal (page 5, sections 0066-69, 71-72, a cache is

utilized which displays the same page rather than retrieving the webpage from the rotating carousel in response to an event).

Mao fails to show that if the current user desired data contents are selected, the current channel is tuned to the channel corresponding to the selected data.

Kaplan shows tuning to a channel based upon changing the data contents (col. 6 lines 22-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mao with the ability to change the channel tuned by selecting different content data so that the user would be provided with the appropriate television signal while he or she was surfing the Internet. Furthermore, this would provide an added navigational means in which the user could search for desired material.

Regarding Claim 22, Mao shows determining if the requested content is in a local storage, retrieving the content if it is in the local storage, and retrieving the content from a bit stream, or carousel stream, if the content is not in storage (page 5 sections 0065-0070, checking the cache for the content, then checking the carousel stream).

Regarding Claim 23, Mao and Kaplan fail to show displaying a message that the A/V signal cannot be displayed or the function of the browser is not operable.

Official Notice is given that it is well known and expected in the art to display information regarding a signal's inability to be processed and displayed. This

communicates to the user that the required data is not available (for example a 'server not found error' during Internet use).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Mao and Kaplan with the ability to inform the user that the required data to display an A/V signal or browser signal could not be received so that the user was aware of the communications problem.

Regarding Claim 24, Mao shows constructing a database of integrated information of channels and corresponding data contents from the bit stream (page 4 sections 0052-000060, 0062, page 5 sections 0063-0068, storing multiple tables and content in the local storage).

Regarding Claim 25, Mao shows that the stored tables and content are used to determine if the data contents corresponds to the channel (page 5 section 0063, looks up PID and other tables to determine content).

Regarding Claim 26, Mao shows that the relationship between the content and channel is determined by the associated tables (page 5 section 0063, looks up PID and other tables to determine content).

Regarding Claim 27, Mao shows an apparatus to perform data content processing comprising:

an inverse multiplexing unit (page 4 section 0060, fig. 8, demodulator and demultiplexer) for receiving a bit stream of broadcast data (fig. 8 item 802), separating audio/video signals and data contents upon receipt of a broadcast signal from the bit stream of a selected channel (page 2 sections 0019-0022),

a browser unit for displaying the current A/V signal and database content (fig. 8 item 816 and 820, WWW browser connected to TV),

a data unit interface for determining when a user selects a new channel the system checks to see if there is corresponding data contents and controls the browser to display the corresponding data contents (page 2 sections 0026-0029, page 3 sections 0030-0033, page 4 sections 0058-0059, locating desired webpage, page 5 section 0063, 0070, processor controlling the searching of the webpages, page 6 section 0081, synchronized to the content of the broadcast video program). Since the processor synchronizes the data contents and AV signal, it automatically controls the browser to select the data contents corresponding to the channel. Mao also shows displaying the AV signals and corresponding data contents (page 4 section 0058, page 5 section 0070).

Mao additionally discloses performing conversion of data contents if it is found that the data contents to be displayed are not consistent with the current AV signal (page 5, sections 71-72, 75-77, when a new event occurs a new web page is displayed), and not performing the conversion of the data contents if it is found that the data contents to be displayed are consistent with the current AV signal (page 5,

sections 0066-69, 71-72, a cache is utilized which displays the same page rather than retrieving the webpage from the rotating carousel in response to an event)

Mao fails to show that if the current user desired data contents are selected, the current channel is tuned to the channel corresponding to the selected data.

Kaplan shows tuning to a channel based upon changing the data contents (col. 6 lines 22-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mao with the ability to change the channel tuned by selecting different content data, as taught by Kaplan, so that the user would be provided with the appropriate television signal while he or she was surfing the Internet. Furthermore, this would provide an added navigational means in which the user could search for desired material.

Regarding Claim 29, Mao shows determining if the requested content is in a local storage, retrieving the content if it is in the local storage, and retrieving the content from a bit stream, or carousel stream, if the content is not in storage (page 5 sections 0065-0070, checking the cache for the content, then checking the carousel stream).

Regarding Claim 30, the limitations of the claim have been discussed with regards to Claim 23.

Regarding Claim 31-33, the limitations of the claims have been discussed with regards to Claims 24-26, respectively.

3. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mao et al in further view of Shoff.

Regarding Claim 7, Mao shows a data contents processing method, comprising:

separating audio/video signals and data contents upon receipt of a broadcast signal and extracting information on the currently received channel and a program identifier (page 2 sections 0019-0022),

constructing a database by forming an integrated information of the channel/program identifier information and data contents in connection with each other (page 2 sections 0019-0026), if the data contents to be displayed are not consistent with the current A/V signal according to the integrated information,

judging whether or not the data contents to be displayed and the current A/V signals are consistent with each other (page 2 sections 0026-0029, page 3 sections 0030-0033, page 4 section 0058, locating desired webpage, page 5 section 0063, processor controlling the searching of the webpages, page 6 section 0081, synchronized to the content of the broadcast video program),

performing conversion of data contents if it is found that the data contents to be displayed are not consistent with the current AV signal (page 5, sections 71-72, 75-77,

when a new event occurs a new web page is displayed), and not performing the conversion of the data contents if it is found that the data contents to be displayed are consistent with the current AV signal (page 5, sections 0066-69, 71-72, a cache is utilized which displays the same page rather than retrieving the webpage from the rotating carousel in response to an event)

and displaying the converted data contents with the A/V signal (page 4 sections 0059, page 5 section 0063), wherein the conversions of data contents includes displaying different data contents and conversion of the channel includes changing the channel (page 3 section 0031, page 6 sections 0081-0082, changing content is synchronized with channel change),

wherein the conversion of data contents includes receiving data content consistent with the current AV signal (page 5, sections 0071-0072).

although the system of Mao seems completely capable of displaying only the A/V signals, this is not specifically stated.

Shoff shows displaying only the A/V signals when there is no supplemental information (col. 9 lines 1-7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Mao with the ability to display only A/V signals as taught by Shoff, for the advantage, in the event that there is no supplemental information, the browser is not operated.

Regarding Claim 8, Mao shows displaying the A/V signal and corresponding data content if the data contents is consistent with the A/V signal (page 5 section 0063-0067, 0070).

Regarding Claim 9, Mao fails to show displaying a message that the A/V signal cannot be displayed or the function of the browser is not operable. Official Notice is given that it is well known and expected in the art to display information regarding a signal's inability to be processed and displayed. This communicates to the user that the required data is not available (for example a 'server not found error' during Internet use). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Mao with the ability to inform the user that the required data to display an A/V signal or browser signal could not be received so that the user was aware of the communications problem.

Regarding Claim 10, Mao shows controlling the channel and the browser according to a user's request and storing the data contents (page 4 sections 0057-0059, page 5 sections 0066-0067, page 6 sections 0081-0082).

Mao fails to show storing the A/V signal.

Official Notice is given that it is well known and expected in the art to store television programming A/V signals for later viewing and reproduction. This allows the user to view a program at his or her convenience.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify Mao with the ability to store the programming signals so that a user could reproduce the program at a later time.

4. Claims 21 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mao et al in further view of Kaplan and Shoff.

Regarding Claim 21, although the system of Mao seems completely capable of displaying only the A/V signals, this is not specifically stated in Mao or Kaplan.

Shoff shows displaying only the A/V signals when there is no supplemental information (col. 9 lines 1-7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Mao and Kaplan with the ability to display only A/V signals as in Shoff so that, in the event that there is no supplemental information, the browser is not operated.

Regarding Claim 28, the limitations of the claim have been discussed with regards to Claim 21.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,785,902-B1 to Zigmond: Document Data Structure and Method for Integrating Broadcast Television with Web Pages.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 571-272-7298. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HBL

Hunter B. Lonsberry
Patent Examiner
Art Unit 2623